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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,728	03/13/2001	Kannan Srinivasan	696.005	2029
35195	7590	10/04/2005	EXAMINER	
FERENCE & ASSOCIATES 409 BROAD STREET PITTSBURGH, PA 15143			RETТА, YEHDEGA	
			ART UNIT	PAPER NUMBER

3622

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

HC

Office Action Summary	Application No.	Applicant(s)	
	09/804,728	SRINIVASAN ET AL.	
	Examiner	Art Unit	
	Yehdega Retta	3622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

This office action is in response to amendment filed June 13, 2005. Applicant amended claim 2. Claims 1-13 are still pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz et al. U.S. Application No. US 2001/0014868, in view of Dahm et al. U.S. Patent No. 6,301,471.

Regarding claims 1, 9-11 and 13, Herz teaches monitoring web-surfer behavior and predicting future surfer behavior and determining a range of offers and providing a promotion to the customer based on the customer behavior (see abstract, par. [0004] to [0011], [0023] to [0046]. Herz teaches providing offers based on user profile attributes including elapsed time period since the last purchase (period of time since the last interaction with the web site), elapsed time period between purchases, etc., storing the data in a database (see [0246]). Herz does not explicitly teach specifying a permissible defunct threshold; determining a probability that a customer will become a defunct after a predetermined period of time has occurred, it is taught in Dahm. Dahm teaches monitoring subscribers behavior. A churn likelihood being predicted based on the subscriber behavior information, such as usage behavior and providing an offer the customer for the purpose of retaining the customer (see col. 11 line 55 to col. 12 line 32, col. 13

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lines 12-26 and col. 15 lines 25-49). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Dahm's defunct threshold in Herz's customized price and promotion system. One would be motivated to set up a threshold value as taught in Dahm in order to predict a customer who is most likely to churn or discontinue the service, and to provide a proper offer to retain such customers. It would be obvious to use Herz's profile attributes, such as the last interaction of the customer with the web site, and set a threshold value to determine the probability the customer would become a defunct.

Regarding claims 2-5 Herz teaches sampling of customers and segmenting the sample population based on a characteristic of the customers sampled; wherein characteristic is amount spent on a web site, interaction with a web site or purchase made at a web site (see [0205] to [0235]).

Regarding claims 6-8 and 12, Herz teaches selection of the promotion is based on predetermined criteria, such as profit, by optimizing an amount of discount offered in the promotion; optimizing performed continuously; wherein the optimization includes sampling responses received from customers to the offer ... the promotion amount provided to other customers based on the promotion discovered in the sample (see [0236] to [0246]).

Response to Arguments

Applicant's arguments filed June 13, 2005 have been fully considered but they are not persuasive.

Applicant argues that Herz teaching of elapsed time period since the last purchase that a customer made from a website is not necessarily comparable or equivalent to the elapsed time period since a customer last interacted with the website. However Applicant claims, in claim 5

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which further limits claim 1, that the last interaction includes making a purchase from the website, which indicates that the claimed feature is the same as Herz's transaction at a website.

Applicant's specification teaches, on page 16, a merchant considers any customer who has not interacted with the site for six or more months to be defunct. Applicant further teaches based on historical data the probability that a customer becomes defunct when the customer has not interacted for one month may be 0.3 and 0.6 by the end of three month. The merchant takes action to retain the customer rather than permit the customer to become defunct.

Herz teaches user being characterized not only by the responsiveness of the user to certain offers but also by many other attributes including the loyalty and consistence factor. Herz further teaches user profile attributes include elapsed time period since the last purchase, elapsed time period between purchases (average), ranges elapsed period to previous offers, total amount spent over the last 6 months, etc. Herz teaches if a customer (particularly a long term customer) has recently been lost the system may find it advantageous to use the most aggressive promotional offers possible in order to reinitiate lost loyalties and less aggressive discounting may be appropriate for very loyal customer. Herz anticipates that a customer becomes defunct (lost) after some elapsed time period. Herz also takes under consideration the average time elapsed between purchases however failed to explicitly teach determining a permissible threshold value in order to retain a customer. Even though the method and system of providing subscriber's loyalty and retention techniques of Dahm is used in customer's of mobile devices, Dahm teaches specifying a threshold value based on customer profile and determining a probability that the customer would be defunct (churn). Dahm teaches the subscriber loyalty application identifies a subscriber who may be susceptible to churning, and once the susceptible

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subscriber is identified generating a customized customer retention offer to the susceptible subscriber. Dahm further teaches the susceptible subscriber is typically identified by comparing stored customer profile information with a group of predetermined threshold values associated with the profile information and based on the comparison a churn susceptibility index is generated. Further Dahm teaches a subscriber having profile information (churn susceptibility index), which exceeds the threshold values, is identified as susceptible to churning (see col. 8 line 55 to col. 9 line 4, col. 10 lines 14-29, col. 12 lines 1-32). It would have been obvious to one of ordinary skill in the art at the time of the invention to implement Dahm's threshold values, for identifying customer who have been statistically identified as being susceptible to churning (defunct) in Herz's customized price and promotion system to loyal customers. One would be motivated to identify Herz's customers before they are considered lost by identifying the customer as being risk for churning (defunct) and applying customized offer, as in Dahm. Dahm's method provides the advantage of identifying customer before they are lost as customers and avoids Herz's aggressive promotional offers possible in order to reinitiate lost loyalties. Dahm solves the problem of losing customer not only by understanding the cause of losing (churning) customers but also by understanding which particular customer are most likely to churn (defunct) (see col. 1 lines 43-53).

Examiner disagrees regarding applicant's argument that the prior art does not teach specifying a range of offers to be included. Both Herz and Dahm teach selecting offers that customer most likely to use (see Herz par. [0246] and Dahm col. 8 line 38 to col. 9 line 4, col. 10 lines 14-24, col. 12 lines 8-13)

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yehdega Retta whose telephone number is (571) 272-6723. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RETTA YEHDEGA
PRIMARY EXAMINER

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